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VB

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|
| 09/272,835      | 03/19/99    | DE SAUVAGE           | F P1268R1           |

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EXAMINER

HAYES, R

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 1644     | 7            |

DATE MAILED: 06/16/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/272,835

Applicant(s)

De Sauvage et al

Examiner

Robert C. Hayes

Group Art Unit

1647 1644



☐ Responsive to communication(s) filed on \_\_\_\_\_

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 1 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-65 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☐ Claim(s) \_\_\_\_\_ is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☒ Claims 1-65 are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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### **DETAILED ACTION**

1. The numbering of claims is not accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution.

When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 56-66 have been renumbered 55-65.

### ***Election/Restriction***

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-15, drawn to an isolated nucleic acid molecule, vectors, host cells, and method of producing a GFR $\alpha$ 3 polypeptide, classified in Class 435, subclass 69.1.
  - II. Claims 16-22 & 49-54, drawn to GFR $\alpha$ 3 polypeptide and chimeric polypeptides thereof, classified in Class 530, subclasses 350.
  - III. Claims 23-24, drawn to antibodies of a GFR $\alpha$ 3 polypeptide, classified in Class 530, subclass 387.1+.
  - IV. Claim 25, drawn to a method of treating a neuronal disorder with an antibody of a GFR $\alpha$ 3 polypeptide, classified in Class 424, subclass 130.1.

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- V. Claim 26-29, drawn to a method of measuring agonist binding to the GFR $\alpha$ 3 receptor, classified in Class 435, subclass 7.21.
- VI. Claim 30-48 & 55-65, drawn to a method of measuring autophosphorylation of a GFR $\alpha$ 3 receptor construct, and kits thereof classified in Class 435, subclass 6.

3. The inventions are distinct, each from the other because of the following reasons:

Although there are provisions under the section for "Relation of Inventions" in MPEP 806.05 for inventive groups that are directed to different products, restriction is deemed proper because these products appear to constitute patently distinct inventions for the following reason:

Groups I-III are directed to products that are physically and functionally distinct, which include protein, nucleic acid, and antibodies. Each of these products can be prepared by different processes, such as through chemical synthesis or isolation from natural sources using various isolation/purification procedures. For example, the proteins of Group II are fundamentally different molecules than the nucleic acid molecules of Group I, which in turn can be used to clone the protein, detect expression of the protein, or used as therapeutic agents in gene therapy. The protein of Group II is also a fundamentally different molecule than the antibody of Group III, which can be generated by immunizing animals with a small synthetic portion of the full length polypeptide. Although the antibody of Group III can be used in isolating the protein of Group II,

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the antibody can also be used diagnostically in other ways, such as in affinity chromatography or in immunoassays, or as a therapeutic agents themselves. Moreover, the proteins of Group II can be utilized in making the antibodies of Group III, but not vice versa. Additionally, neither the proteins of Group II, or antibodies of Group III require the vectors and host cells of Group I, and vice versa. It is pointed out that there is a proper distinction between these groups, since each product is not required in order for the other to exist. Thereby, these groups are distinct and separable for the reasons stated.

Although there are provisions under the section for "Relation of Inventions" in MPEP 806.05 for inventive groups that are directed to different methods, restriction is deemed proper because these methods appear to constitute patently distinct inventions for the following reason:

Groups IV-VI are directed to methods to treat neuronal disorders in a patient, methods of measuring agonist binding to the GFR $\alpha$ 3 receptor, or methods of measuring autophosphorylation of GFR $\alpha$ 3 receptor constructs. Each of the methods require physically and functionally distinct elements and possess limitations with different and distinct goals. For example, the use of constructs and transfected cells in the method of Group VI is distinct from the use of the antibodies required in the method of Group IV and the agonists and polypeptides required in the method of Group V, and vice versa. Additionally, the method of Group IV requires patients with specific neuronal disorders not required in the detection methods of Groups V and VI, and vice versa. Moreover, solid supports, as required in the method of Group VI, are

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not required in the methods of Groups IV or V, and vice versa. These inventions are, therefore, patentably distinct, since one is not required for the other.

Because these inventions are distinct for the reasons given above, they have acquired a separate status in the art as shown by their different classification, and the non-coextensiveness of the search and examination for each group would constitute an undue burden on the examiner to search and consider all the separable groups with their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

4. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Robert Hayes whose telephone number is (703) 305-3132. The examiner can normally be reached on Monday through Thursday, and alternative Fridays, from 8:30 AM to 5:30 PM.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan, can be reached on (703) 308-3973. The fax phone number for this Group is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.



Robert C. Hayes, Ph.D.  
June 14, 2000



CHRISTINA Y. CHAN  
SUPERVISORY PATENT EXAMINER  
GROUP 1800-1640